DOCUMENT RESUME

ED 141 676 CG 011 496

AUTHOR Rae, William A.; Willis, Diane J.
TITLE Effectiveness of Discussion, Modeling and Experiential-Simulation in Training Empathy Skills to Medical Students.
PUB DATE 73
NOTE 22p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Empathy; Helping Relationship; Higher Education; *Interpersonal Competence; *Medical Students; Research Projects; *Sensitivity Training; Social Development; *Teaching Techniques; Therapy

ABSTRACT

Twenty first-year medical students were randomly assigned to one of four short-term empathy training groups (discussion, modeling, experiential-simulation and control). Empathy skills were assessed immediately after and four weeks after training sessions. Although results were not statistically significant, the trends were in the predicted direction. (Author)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED141676

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

EFFECTIVENESS OF DISCUSSION, MODELING AND EXPERIENTIAL-SIMULATION IN TRAINING EMPATHY SKILLS TO MEDICAL STUDENTS

By William A. Rae, Ph.D. and
Diane J. Willis, Ph.D.

INTRODUCTION AND REVIEW

The research literature abounds with evidence confirming the importance of a patient's psychological state in relation to his physical illness. For example, Engle (1968) has noted that a consistant psychological pattern of responses exists which are associated with the onset of illness and, on occasions, death. He calls this pattern the "giving up-given up" complex and it is marked by feelings of helplessness, incompetence, abandonment, frustration and loss of continuiety of time. Elizabeth Kubler-Ross (1969) has observed a similar phenomenon. Anniversary reactions and emotional deadlines have been shown to effect the time of illness or death (Fischer and Dlin, 1972) as have beliefs in the supernatural and voodoo (Lester, 1972; Morgenson, 1973). Morgenson (1973) and Engle (1968) imply that human relations and interactions may slow the death process.

The importance of the psychological well-being of the hospitalized patient has not been adequately recognized. Although professional education programs purport to teach the importance of the hospitalized patient's psychological state, little formal training is given to develop these skills. It would appear that empathy training may be an excellent method of providing skills to those helping professionals who must provide an atmosphere for the hospitalized patient where he might be psychologically strengthened.

Empathy is the ability to perceive accurately the feelings of another

CG011496

person and to communicate this understanding to him. That is, it is the ability to understand the patient from the patient's point of view. The importance of empathic understanding has been recognized to be extremely important within the psychotherapeutic relationship. That is, it has been shown that therapists with high empathy levels are the same therapists who produce promote positive outcome (Truax & Mitchell, 1971). Carkhuff (1969) has also shown empathy to be important for effective helping. Although empathy is seen to be a crucial skill for all helping professionals, the objectives of present-day nursing and physician training programs and the practical experiences they offer show little attempt to increase empathic abilities of the students. In fact, studies have shown that the student's level of empathic ability was negatively correlated with grades in academic and practicum courses. Empathy training programs have been developed for nursing students (Kalisch, 1971), teachers (Gazda, 1973), psychotherapists and counselors (Truax and Carkhuff, 1967), policemen (Zacker, 1972), and medical corpsmen (Anthony & Wain, 1971). All have shown positive effects of empathy training. To the knowledge of this researcher, no systematic training program has been developed for medical students or physicians.

At this point I would like to further define what I mean by "empathy" for medical personnel. One must recognize that there are different levels of being empathic and the high level of being empathic is not always appropriate. It is not reasonable to think that medical personnel should be extremely empathic to all patients at all times. In the extreme form, empathy could render the physician impotent. Take for example the situation of the surgeon who has a tremendous amount of empathy for his patient. Such an intense degree of empathy would make the physician unable to violate the patient's body with his scalpel. Medical personnel must be able to have emotional

distance from their patients, as do psychotherapists, in order to be objective in assessing their patient's medical condition. It is obvious that I am not advocating empathy as being always necessary or even advisable in the treatment of a patient with a medical problem. But a physician should have the skill and ability to be empathic if the situation warrants. If a patient has a significant psychological component or psychological reaction to his illness, the physician must have the skill to respond sensitively to that patient.

Numerous methods have been employed in the training of empathic understanding and empathic responding. Saltmarsh (1973) used programmed instruction to train counselors. He discovered that the programmed instruction method was superior in teaching empathy skills to the traditional read-discussion method. Cyphers (1972) used programmed instruction and modeling techniques in empathy training for student teachers. As with Saltmarsh (1973), Cyphers found programmed instruction to be superior to the read-discussion method (i.e.; the control group). In addition, it was determined that the modeling treatment was superior to the control group and the programmed instruction group.

Dalton and others (1973) have applied the principles of social learning (i.e.; modeling) to empathy training for undergraduate rehabilitation counseling students. The three treatment groups compared modeled learning experience, reading method and control group. The subjects who participated in the modeling group displayed a significantly higher level of empathic functioning than the other two groups. No significant differences were discovered between the reading group and the control group. This result implies that when students only read about empathy (i.e.; the most common

instructional mode in nursing and medical school), they are just as empathic as having no training at all (control group).

Other more inclusive interventions for nursing students involving discussions, discrimination training, communication practice, role playing, role modeling, and an experiential component has been discussed elsewhere (Kalisch, 1971). At this point, however, no systematic research has been undertaken to compare the effectiveness of the various intervention modalities. The purpose of this research is to study the relative effectiveness of three short-term interventions (discussion, modeling, and experiential-simulation) for the training of empathy skills to medical students.

Methodology

Subjects: The subjects in this experiment were 20 first-year medical students at the University of Oklahoma Health Sciences Center. All subjects volunteered for a workshop that was purportedly designed to help them develop their psychological skills for working with hospitalized patients. The only prerequisite was that the students had not participated in any form of empathy training or psychotherapy.

Empathy: Empathy, the dependent variable, was assessed by the Rae Empathic Statement Test (REST). The REST has been derived from the responding with empathy exercise as outlined by Gazda in 1973 (see Appendix I for a copy of the REST). In this test, the subject is given ten statements purportedly made by hospitalized patients and then allowed to write a response to the item in a space provided. The subject's written response to each item was rated on a scale from 1 to 5 by three independent, blind judges as to the degree of empathic understanding. The three judges were advanced psychology graduate students who were trained as to the rating system. Their ratings

from one (not empathic) to five (highly empathic) were assigned according to the specific criteria outlined by Truax and Carkhuff (1967). (See Appendix II for a description of the criteria of the five levels).

Treatment Groups

Each treatment group will last 1½ hours. Below are listed the cardinal features of each group and a brief outline in which each group will proceed. Each group was meticulously structured as far as content in order to assure standardized experiences for all subjects.

1. Experiential-simulation - The subject will participate in a laboratory, workshop-type exercise where the interactions between a physician and a hospitalized patient will be simulated and role played by the subjects. The session will proceed as follows:

1.	Introduction to what empathy is and its importance	15 minutes
2.	Subjects in small groups to discuss their assigned roles (simulation)	10
3.	Subjects role play their role with each other	20
4.	Discussion of observations and feelings of experience	35
5.	REST administered	10

2. Modeling - The subjects will participate in a group where they will view a number of interactions between two actors role playing a physician and a hospitalized patient. In contrast to the experiential-simulation treatment, the subjects will not be allowed to practice empathy. The session will proceed as follows:

1.	Introduction to what empathy is and its importance	15 minutes
2.	Subjects observing role played session of empathy between two actors	30
3.	Discussion of observations	35
4.	REST administered	10

3. Discussion - The subjects will participate in a group where they will discuss empathy in a general sense. In contrast to the experiential-

simulation and the modeling treatment groups, the subjects will not observe or practice empathy. The session will proceed as follows:

1.	Introduction to what empathy is and its importance	15 minutes
2.	Subjects in small groups to discuss what empathy is from their own frame of reference	30
3.	Discussion in large group of what empathy is	35
4.	REST administered	10

4. Control - The subjects will participate in a group where they will discuss various topics of human behavior and psychology as they relate to hospitalized patients, but will not discuss empathy except in a peripheral way. The session will proceed as follows:

1.	Introduction to the importance of psychology	15 minutes
2.	Subjects in small groups to generate topics for discussion	20
3.	Discussion in large group of topics	45
4.	REST administered	10

Procedures

A posttest-only control group design was employed with a follow-up conducted three weeks after the posttest. A posttest-only design was selected in order to avoid possible interaction effects of testing and treatment.

The subjects were randomly assigned to one of the four treatment groups with five subjects per group. All subjects were required to attend the entire treatment session of 1½ hours. At the end of the treatment session, the subjects filled out the REST and were allowed to give general feedback on the treatment. Three weeks after the posttest, each subject was contacted by mail and asked to fill out the return another REST. All subjects were informed that their responses to the REST were confidential. After the final REST had been received, each subject received a letter explaining the experiment in detail and the purpose of the experiment.

Based on the previous research, the experiential-simulation group was hypothesized to be the most effective in imparting empathy skills to the students than any of the other treatment groups. In the same way, the modeling group was hypothesized to be more effective than the control or discussion groups.

Results

The judges' rating for empathy of the subjects were correlated. As can be seen in Figure 1, a significant agreement on the judges' ratings were found to at least the .05 level of significance.

Figure 2 shows the analysis of variance between experimental groups to the degree of empathy immediately after the experimental treatment. There were no significance between group differences in the four treatment groups. In the same way, Figure 3 shows the analysis of variance between experimental groups after the three week follow up. Again, there were no significant differences. Figure 4 shows the mean empathy scores for subject the four experimental groups. Visual inspection indicates that there is little difference between means. This result is most interesting since these medical students, even in the groups where empathy was taught, were not able to average a Level 3 empathic response. That is, they were not even able to reflect and understand the most basic surface feelings of the patient. This result points to the rather low level of empathic abilities of these students.

Figure 5 is a graph of the non-significant trends in the four experimental groups. As was predicted, the subjects in the control group had the lowest average rating of empathy. In addition, there was little change in the rating of empathy between the experimental session and the three week follow up. This result was expected since no discussion of empathy was made in these groups. The subjects in the modeling group had a higher degree

FIGURE 1

CORRELATION BETWEEN JUDGE'S RATINGS OF EMPATHY FOR SUBJECTS

JUDGES COMPARED	After Experiment	Three Week Follow-Up
1+2	.47*	.47*
2+3	.55*	.51*
1+3	.86**	.90**

* Significant with $p < .05$

** Significant with $p < .01$

FIGURE 2

ANALYSIS OF VARIANCE BETWEEN EXPERIMENTAL GROUPS
OF DEGREE EMPATHY AFTER EXPERIMENTAL TREATMENT

SOURCE	SS	df	MS	F	P
TOTAL	1988.25	19	---	---	---
BETWEEN GROUPS	274.25	3	91.416	0.8533	non-significant
WITHIN GROUPS	1714	16	107.125	---	---

FIGURE 3

ANALYSIS OF VARIANCE BETWEEN EXPERIMENTAL GROUPS
OF DEGREE OF EMPATHY AFTER THREE WEEK FOLLOW-UP

SOURCE	SS	df	MS	F	P
TOTAL	2617.74	19	---	---	---
BETWEEN GROUPS	146.24	3	48.747	0.3155	non-significant
WITHIN GROUPS	2471.5	15	154.469	---	---

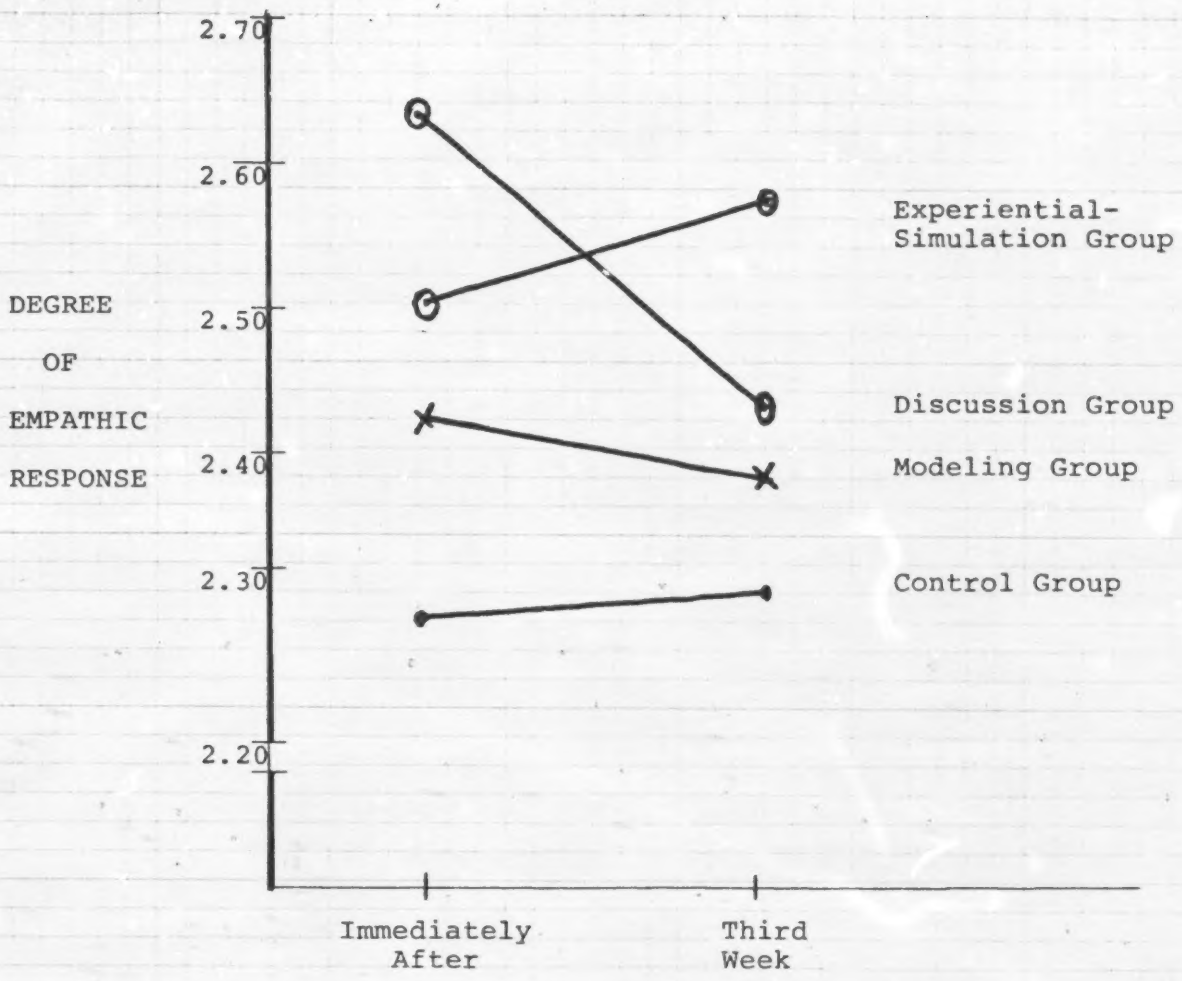
FIGURE 4

MEAN EMPATHY SCORES

Experimental Group	After Experiment	Three Week Follow Up
CONTROL	2.28	2.30
DISCUSSION	2.62	2.43
MODELING	2.44	2.38
EXPERIMENTAL SIMULATION	2.50	2.55

Empathy Scores for each subject in the four experimental groups

FIGURE 5



Graphic Representation of Nonsignificant Trends

for the four Experimental Groups

of empathic responding than the control group across time. At the same time, the modeling group's rating of empathic responding was lower than both the experiential-simulation and the discussion groups. Again this result was expected based on previous research.

The implied interaction effect between the experiential-simulation group and the discussion group is one of the most interesting non-significant trends in this experiment. This result implies that if students learn empathy skills through the method of discussion, as is trained in most medical and professional schools, they will not retain the skills that they have learned over time. In other words, there is a speedy decay of learning. In the same way, it appears that students in the experiential-simulation group may experience latency learning of empathy over time. It may be that as they experienced and practiced empathy in a training session, they were more apt to experience and practice empathy during the three week period.

Without statistical significance, it is difficult to make an arguement for changing any of the training programs in medical schools. While this experiment was being conducted, the experimenter became aware of a rather interesting differential response by the medical students in the different treatment groups which seemed to correlate highly with the personality types. Generally, the more constricted, intellectual medical students seemed to feel most comfortable with and most open to the discussion group treatment. In contrast to this, the more free-spirited, spontaneous medical students preferred the experiential-simulation group treatment. That is, it may be that it is not just the type of training method that is important but how that method fits the student's unique personality. The experimenter felt

that during the experiment some students' personal space was violated by being encouraged to do experiential activities about feelings. It is very important that the medical students' defensiveness be deescalated during empathy training if they are to be open to the learning.

Bibliography

Anthony, W.A. & Wain, H.J. "An investigation of the outcome of empathy training for medical corpsmen," Psychological Aspects of Disability, 1971, 18(2), 86-88.

Carkhuff, R.R. Helping and Human Relations Volume II. New York: Holt, Rinehart and Winston, Inc., 1969.

Cyphers, A.L. "The efficacy of video and symbolic modeling, feedback and reinforcement as means to teach empathy to student teachers," Dissertation Abstracts International, 1973, 33(8-A), 4170.

Dalton, R.F., Sundblad, L.M. and Hylbert, K.W. "An application of principles of social learning to training in communication of empathy," Journal of Counseling Psychology, 1973, 20(4), 378-383.

Engle, G.L. "A life setting conducive to illness, " Bulletin of the Menninger Clinic, 1968, 30, 24-28.

Fisher, H.K. & Dlin, B.M. "Psychogenic determination of time of illness or death by anniversary reactions and emotional deadlines," Psychosomatics, 1972, 13(3), 170-173.

Gazda, G. Human Relations Development: A Manual for Educators. Boston: Allyn and Bacon, 1973.

Kalisch, B.J. "Strategies for developing nurse empathy," Nursing Outlook, 1971, 19(11), 714-718.

Kubler-Ross, E. On Death and Dying. New York: Macmillan Publishing Co., 1969.

Lester, D. "Voodoo death: Some new thoughts on an old phenomenon," American Anthropologist, 1972, 74(3), 386-390.

Morgenson, D.F. "Death and interpersonal failure,: Canada's Mental Health, 1973, 21(3), 10-12.

Saltmarsh, R.E. "Development of empathic interview skills through programmed instruction," Journal of Counseling Psychology, 1973, 20(4), 375-377.

Truax, C.B. and Carkhuff, R.R. Toward Effective Counseling and Psychotherapy: Training and Practice. Chicago: Aldine, 1967.

Truax, C.B. and Mitchell, K.M. "Research on certain therapist interpersonal skills in relation to process and outcome," In A.E. Bergin and S.L. Garfield (Eds.) Handbook of Psychotherapy and Behavior Change. New York: Holt, Rinehart and Winston, 1971.

Zacker, J. "Understanding one's clients: An attempt to improve sensitivity and morale in police recruiting," Psychological Reports, 1972, 31(3), 999-1008.

APPENDIX I

Rae Empathic Statement Test (REST)

R.E.S.T.

INSTRUCTIONS: This test measures how you would respond to patients. Below, ten situations are described where a hospitalized patient makes a statement to his/her physician. In the blank space below each item, write a statement which best reflects what you would say to the patient in that particular situation. Try to imagine yourself as that patient's physician and respond as honestly and spontaneously as you can.

A 16 year old male with a husky, masculine build broke his leg in a high school football game. He has been in the hospital for a week and although he has many friends, he has had few visitors because he is from a small town many miles away. As you are coming into his room to check on him, he says:
"Hey, guess what me and a couple of friends did a couple of weeks ago. We came up to OklahomaCity for part of theweekend and went to Filthy McNasty's (a club) and picked up a couple of college chicks ..... told 'em we was from O.U. And they believed us too!"

_____

_____

_____

_____

A 70 year old male has been hospitalized for chronic colitis. His prognosis is excellent; all medical tests show he is getting better. His wife died two years ago and his children have put him in a retirement home. After you complete rounds he pulls you aside and says,
"The food in this hospital is horrible. How come they serve us the same pig slop everyday. I have a friend, Bernie, who had colitis and they gave him chopped beef instead of this lousy mush."

_____

_____

_____

_____

A 7 year old female has been hospitalized for renal failure. She is getting progressively worse as her other organ systems are failing. It has been generally agreed by the medical staff that the patient is terminal. She is under strict orders not to drink fluids, but is thirsty all the time. As you are leaving her room, she pulls you aside and says,
"Hey doctor .....please help me. I want some water. I'm thirsty. (Begins crying) Why can't I have water?"

A 46 year old male has been hospitalized for a tumor near his vocal cords. Although not in a critical area, the specialists thought that the tumor might be an active cancer. The patient was aware of this possibility. After the surgery, the tumor was found to be benign. After checking the patient for the last time before discharge, he whispers to you,
"I'm gonna go home and sing. (smiles)"

Mrs. Smith is a 32 year old woman who was hospitalized for surgery on an ovarian cyst. During the surgery it was necessary to remove both ovaries. Mrs. Smith is happily married and a mother of three children. As you enter the room, she is alone and drying. You ask, "How are you today, Mrs. Smith?" I response she says, "Mrs. Smith??? (sob) How can you say that now. I'm but half a woman ..."

A 35 year old male has been hospitalized for tests in reference to dizzy spells. All medical tests have been negative. During his three day hospitalization the patient has not had any visitors. From the medical record you know that he lives alone and has few friends and appears on casual meeting to be socially inept. As you ask him how he feels, he responds:
"Who cares ....."

A 23 year old female has been hospitalized for tests relating to the possibility of a mild form of diabetes. She has a family history of diabetes and has been tired and listless during the past few months. As you see her this particular morning, she has had a bad night and is especially tired. She asks,
"Doc, am I going ..... I mean, am I ..... will I be OK????"

A 16 year old female has been hospitalized for thyroid tests. She is an extremely attractive and well-developed adolescent. She is very sociable and you have found her company very enjoyable. As you approach her she says,
"Ya know what. I've been reading about how boys mature slower than girls...and I think that's right. Ya know what I mean? All other 16 year old boys are so young and immature. Most guys think I'm attractive. I really am old for my age."

A 35 year old Greek national who was visiting this country was in an automobile accident and is being treated in the emergency room for cuts and bruises. He speaks very broken English and has never really been to many doctors in his life; especially a doctor in a large medical complex. As you are trying to calm him down, he remains agitated speaking in Greek at a very high speed. You approach him with instruments for cleaning his wounds and he backs off in fear. He says,
"What you make. I no want to be picked on."

A 35 year old male has been sharing a hospital room with a 50 year old male heart attack victim. The 50 year old man died the night before. The two had been close during their stay in the hospital. As you come into the room he begins yelling,
"When am I going to leave this place. The service here is POOR. I could get better service at McDonalds."

APPENDIX II

Ratings on Accurate Empathy

RATINGS ON ACCURATE EMPATHY
(From Truax and Carkhuff, 1967)

LEVEL 1

The first person communicates no awareness of even the most obvious, expressed surface feelings of the second person. The first person may be bored or uninterested or simply operating from a preconceived frame of reference which totally excludes that of the other person(s).

LEVEL 2

The first person may communicate some awareness of obvious surface feelings of the second person, but his communications drain off a level of the affect and distort the level of meaning. The first person may communicate his own ideas of what may be going on, but these are not congruent with the expressions of the second person.

LEVEL 3

The first person responds with accurate understanding of the surface feelings of the second person but may not respond to or may misinterpret the deeper feelings.

LEVEL 4

The facilitator communicates his understanding of the expressions of the second person at a level deeper than they were expressed, and thus enables the second person to experience and/or express feelings he was unable to express previously.

LEVEL 5

The facilitator responds with accuracy to all of the person's deeper as well as surface feelings. He is "together" with the second person or "tuned in" on his wave length. The facilitator and the other person might proceed together to explore previously unexplored areas of human existence.